

# CAPACITY DEVELOPMENT STRATEGY

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# Capacity Development History

- Safe Drinking Water Act Amendments were reauthorized by Congress in 1996.  
(<http://www.epa.gov/safewater/sdwa/text.html> )
- Congress specifically directed the EPA not to implement prescriptive Capacity Development regulations, but merely to determine if states developed programs for purposes of the Drinking Water State Revolving Fund (DWSRF).
- It is intended that states have maximum flexibility in program development and implementation.
- Consequently, no federal regulation exists or will be developed.

# Public Participation

- The Energy and Environment Cabinet is seeking public participation and comment on Kentucky's revised **Capacity Development Strategy**.
- The current strategy was approved by US EPA Region IV in 2000.
- It is being revised to eliminate language requiring the implementation of a Capacity Development certification program.
- 5 stakeholder meetings being held July 21-25 and August 13.
  - Prestonsburg, London, Paducah, Owensboro, Frankfort
- Public comment period from July 21 to August 21, 2008.

# Capacity Development Program

- SDWA established funding for the DWSRF for each state to finance infrastructure improvements of public water systems.  
(<http://www.epa.gov/safewater/dwsrf/>)
- To receive full funding each state was required to establish a capacity development program.
  - DWSRF has a withholding provision with a maximum of 20%.
- DWSRF funds cannot be provided to a system that lacks capacity or is in significant noncompliance unless:
  - assistance will ensure compliance
  - system agrees to undertake feasible and appropriate changes to ensure capacity.

# KRS 151.630

## Cabinet's duty to administer system capacity program:

- For purposes of KRS151.630 to 151.636 ‘system capacity’ means the technical, financial and managerial capability to operate a public water system in compliance with the Federal SDWA, as amended by Public Law 104-182. The Cabinet may promulgate administrative regulations as necessary.
  - This program is intended to help support the new EPA Sustainable Infrastructure Initiative.

# Sustainable Infrastructure (SI)

- **EPA is committing to promote sustainable practices that will help to reduce the potential gap between funding needs and spending at the local and national level.**

- **Four ‘pillars’ for SI are:**

## **Better Management**

- Asset Management, Consolidation

## **Full Cost Pricing**

- All costs involved in constructing, operating and maintaining infrastructure
- Revenue covers the cost of doing business

## **Efficient Water Use**

- Metering, water loss, public education

## **Watershed Approaches to Protection**

- Targets resources towards highest priorities

- **EPA WEBSITE**

<http://www.epa.gov/waterinfrastructure/index.html>

# KRS 151.632 (1)

System capacity development strategy –  
Assistance to existing systems in plan  
development:

“Not later than August 6, 2000, the cabinet shall establish and begin implementing a strategy to assist public water systems in acquiring and maintaining technical, financial, and managerial system capacity.”

- Signed into law by Governor Patton on April 3, 1998.

# KRS 151.632 (2)

There are five components that must be included in the Capacity Development Strategy. The first component is:

- a) The methods or criteria used to identify and prioritize PWS most in need of improving technical, managerial, and financial capacity.



# How we got here?

- The Cabinet organized a stakeholder group (Steering Committee) to provide advice on various drinking water topics.
- The first meeting was February 2007.
- Members are from public water systems, technical assistance providers, engineering firms, area development districts, industry associations, and state government regulators.

# Steering Committee Members

- 1 Large Public Water System
- 2 Medium Public Water Systems
- American Water Works Association (AWWA)
- Engineering Profession
- Kentucky Area Development Districts (ADDs)
- Kentucky Association of Counties (KACO)
- Kentucky Division of Water (KDOW)
- Kentucky Infrastructure Authority (KIA)

# Steering Committee Members

- Kentucky League of Cities (KLC)
- Kentucky Rural Community Assistance Program (RCAP)
- Kentucky Rural Water Association (KRWA)
- Kentucky Water and Wastewater Operator's Association (KWWOA)
- Municipal Water and Wastewater Association (MWWA)
- Public Service Commission (PSC)
- Western Kentucky University (WKU)

# Sub Group – Capacity Development

- 2 Large Public Water Systems – Amy Kramer (Northern Ky), Greg Heitzman (Louisville)
- 3 Medium Public Water Systems – Don Blackburn (Berea), Vernon Azevedo (Winchester), Jon Schubarth (Warren Co.)
- Engineering Profession – Mike Wilmoth
- KACO – Roger Recktenwald
- KDOW – Donna Marlin, Leslie Harp

# Sub Group – Capacity Development

- KIA – (Chris Whitaker)
- KRCAP – Kim Padgett
- KRWA – Andy Lange
- KWWOA – Kevin Shaw
- MWWA – Annette Dupont-Ewing
- PSC – Gerald Wuetcher (Chair)
- WKU – Jana Fattic

# System Capacity Assessment

- The assessment will consist of questions
  - that are considered critical to determine if a system lacks capacity for each category (i.e. technical, managerial, and financial); and
  - best management practices (BMP).
- System assessments will occur at the same time as the Sanitary Surveys are conducted.
- The assessment criteria will be re-evaluated on a triennial basis.
- The assessment questions are available on the website:

<http://water.ky.gov/dw/profi/awop/CapacityDev.htm>

# Technical Capacity

- **Source water adequacy:**
  - Quantity
  - Quality
  - Purchased Water Contract Amounts
- **Technical knowledge:**
  - Certified operator
  - Operation/maintenance expertise
  - Understand and comply with technical aspects or regulatory requirements
  - Understand system's technical characteristics
- **Infrastructure adequacy:**
  - Condition of wells or source water intakes
  - Condition of treatment, storage & distribution components
  - Current & future needs
  - Emergency preparedness

# Managerial Capacity

- **Administrative:**

- Defined organizational structure
- Sufficient staff w/ appropriate expertise, experience, licenses & certifications and continuing education opportunities
- Written procedures & policies for system management & operation

- **Planning:**

- Plans to address pending and current regulatory requirements, and growth
- Updated Emergency Response Plans
- Response to Water Shortages



# Managerial Capacity (cont.)

- **Operating:**
  - Tracking water loss
  - Maps of distribution assets
  - Cross Connection Control Program
  - Written procedures for Boil Water Advisories
- **Customer Service:**
  - 24 hr Emergency Response
  - Established business hours
  - Rules governing provision of service
  - Rules, Rates and Regulations made available to the public

# Financial Capacity

- **Planning:**

- Operational Budget
- Capital Improvement Plan
- Rate Structure

- **Reporting**

- Uniform System of Accounting or equivalent
- Monthly comparisons between budgeted and actual expenses and revenues

# Financial Capacity (cont.)

- **Performance:**

- Annual review of rates to ensure that revenue goals are met
- Retained earnings surplus
- System meets required Debt Coverage ratio of 1.2

- **Controls:**

- Financial statements audited by CPA
- Are audits approved by governing board
- Written procedures for internal transactions
- Written policy for delinquent accounts

# Pilot Testing

- 7 public water systems tested during July 2008:
  - 3 surface systems (small, medium, large)
  - 2 purchase systems (small, medium)
  - 2 ground water systems (small, medium)
- Staff assessed the individual systems with the promise of no ramifications
- Results

# KRS 151.632 (2)

**The second component that must be included in the Capacity Development Strategy is:**

- b) A description of any factors at the Federal, State or local level that encourage or impair capacity development. These are to include:
- Institutional
  - Regulatory
  - Financial
  - Tax
  - Legal factors

# KRS 151.632 (2)

## **The third component that must be included in the Capacity Development Strategy is:**

- c) A description of how the Cabinet will use the authorities and resources of the SDWA as amended by PL 104-182, or other means, to:
  - Assist public water systems in complying with national primary drinking water regulations
  - Encourage the development of partnerships between public water systems to enhance the system capacity of public water systems
  - Assist public water systems in the training and certification of operators.

# KRS 151.632 (2)

**The fourth component that must be included in the Capacity Development Strategy is:**

- d) A description of how the State will establish a baseline and measure improvements in system capacity with respect to national primary drinking water regulations, this chapter, KRS 224.10-110 and administrative regulations promulgated there under.

# KRS 151.632 (2)

**The fifth component that must be included in the Capacity Development Strategy is:**

- e) An identification of the persons that have an interest in or are involved in the development and implementation of the system capacity development strategy, including all appropriate agencies of federal, state, and local governments, private and nonprofit public water systems, and public water system customers.



# Revised Strategy

- If a system misses one critical question in a category, then it is deemed to 'lack' or need to improve for that category.
- Stakeholders recommended a tiered (Four Tiers) approach for systems that were deemed to lack capacity.
- A system may jump a Tier under certain circumstances.
- Cabinet website to be developed to list systems in various tiers.

# After the Assessment

- A report will be forwarded to the Public Water System with:
  - Sanitary Survey results
  - System Capacity results
- If all critical questions are acceptable, then no follow up required.
- If critical questions are not acceptable, then the system will be required to follow the following Four-Tiered approach.

# KRS 151.632 (3)

- If the Cabinet determines that an existing public water system does not have system capacity, it may assist the public water system in submitting a system capacity development plan as part of the long range water supply plan required by KRS 151.114.
- The plan shall contain timetables, goals, and funding sources necessary for the public water system to achieve system capacity.

# Tier 1

- **Water system must develop a System Capacity Development Plan (CDP)**
  - List of capacity issues per category
  - List of actions to be completed to address capacity issues
  - Delineated timeline for improvements
- **Examples to be developed by DOW**
- **PWS has 45 days to submit**
  - DOW evaluates the CDP and develops a cooperative agreement negotiated with the PWS
  - Signed by DOW and PWS (Letter of Agreement)
    - Accountability factors
    - Assists in getting funding
    - If plan not implemented, then elevated to another Tier.
    - The cabinet shall incorporate the CDP into the Water Management Supply Planning process authorized by KRS 151.114.

# Tier 2

- **Examples of Occurrences:**
  - System's water availability not acceptable
  - Conditions pose a threat to the public's safety and health.
- **An Agreed Order will be negotiated**
  - CDP required.
  - Full sanctions may be imposed depending on situation.
  - Assistance provided for proposed projects that will return the system to achieve capacity.
  - Signed by Cabinet and PWS
  - Notification of funding agencies of potential problems.

# Tier 3

- **Examples of Occurrences:**
  - System did not submit Tier 1/Tier 2
  - Progress not occurring in accordance with Tier 1/Tier 2
  - System does not agree to Tier 1/Tier 2
- **Division of Water makes formal referral to the Division of Enforcement**
- **An Agreed Order will be negotiated, which may include:**
  - Signed by Cabinet and PWS
  - Possibility of penalties (monetary as well as regulatory)
  - Repayment of any funds previously received as part of the CDP if system doesn't comply
  - System does not get funding
  - Cabinet shall notify potential sources of funding, LRC, Clearinghouse

# Tier 4

- **Examples of Occurrences:**
  - System refuses to enter into Agreed Order
  - System continues not to comply with Agreed Order
- **Formal referral to the Office of General Counsel.**
- **Cabinet may seek appointment of receiver or other alternatives for consolidation and/or acquisition.**

# KRS 151.634 – New Systems

- After October 1, 1999 any new community or nontransient noncommunity water systems, as defined by federal law, shall not be created unless they have system capacity.
- For new community or nontransient noncommunity water systems that intend to being operating after October 1, 1999, the Cabinet shall not approve plans pursuant to KRS 224.10-110 unless the systems demonstrate to the Cabinet that they have system capacity.



# New System Reviews

- a) An estimate of the number of customers the water system will serve;
- b) The rates the system intends to charge, if applicable, and if not, how the system intends to raise money to operate, including the identification of sources of revenue and the annual revenue expected from each source;
- c) Identification of financing to be used for the system, including the total cost of the project;
- d) The median household income of the area to be served;

# New System Reviews

- e) A list of all outstanding debts and obligations the public water system may have at completion of the project, including all debt service requirements;
- f) An estimate of the annual cost to operate the system, including all maintenance, operation, administrative, and general expenses by major category;
- g) An explanation of the water system's management structure;
- h) A business plan, if applicable;

# New System Reviews

- i) An estimate of annual treatment and monitoring costs to comply with Safe Drinking Water Act Requirements;
- j) A description of the proposed day-to-day operation and management of the water system, including an outline of duties of the personnel and management associated with the system;
- k) Other information related to the management or finances of the water system that will allow the cabinet to determine if the system has technical, managerial, and financial system capacity.

# Capacity Development Strategy

- Copy of the current EPA approved Capacity Development Strategy is available at:  
<http://water.ky.gov/dw/profi/awop/CapacityDev.htm>
- Please provide any comments on the five components or anything related to Kentucky's strategy.
- All comments are welcomed and appreciated.
- The revised Capacity Development Strategy will be posted on the website after EPA approval.

# Timeline

- 7/08 Stakeholder meetings
- 8/08 Final Capacity Development Strategy developed and forwarded to EPA for approval
- 1/09 Develop sample documents/training modules
- 4/09 Draft proposed regulations for Office of General Counsel review
- 6/09 Submit to LRC for promulgation

**Questions? Comments?**

**Copy of this presentation is available at:**

**<http://water.ky.gov/dw/profi/awop/CapacityDev.htm>**

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